

**PROCESS FOR MONITORING THE GASEOUS  
ENVIRONMENT OF A CRYSTAL PULLER  
FOR SEMICONDUCTOR GROWTH**

ABSTRACT OF THE INVENTION

5           This invention relates to a process for monitoring the  
gaseous environment within a sealed crystal pulling furnace,  
used for the growth of an ingot of a semiconductor material  
in a growth chamber maintained at a sub-atmospheric  
10           pressure. The process comprises sealing the chamber,  
reducing the pressure within the sealed chamber to a sub-  
atmospheric level, introducing a process gas into the  
chamber to purge the chamber and form a gaseous environment  
therein, and analyzing the gaseous environment within the  
15           chamber for the presence of a contaminant gas in a  
concentration which is greater than the concentration of the  
contaminant gas in the process gas.